ABSTRACT OF THE DISCLOSURE

A method for optimizing the illumination conditions of a lithographic apparatus by computer simulation using isofocal compensation, the lithographic apparatus including an illuminator, a projection system and a mask having at least one pattern to be printed on a substrate. This method includes defining a lithographic pattern to be printed on the substrate, selecting a simulation model, selecting a grid of source points in a pupil plane of the illuminator, calculating separate responses for individual source points, each of the responses representing a result of a single or series of simulations using the simulation model, calculating a metric representing variation of the separate responses for individual source points with defocus and adjusting an illumination arrangement based on analysis of the metric.